

7B 2 ✓  
-- 1. A method for manufacturing hot rolled steel sheets comprising the steps of:  
passing molten steel through a continuous caster having a mold after having been  
poured into a ladle and a tundish to manufacture a slab;  
cutting the slab to predetermined lengths using a cutter to form a plurality of cut  
slabs;  
heating the cut slabs to a predetermined temperature in a first heating furnace;  
width rolling the cut slabs by using a width roller;  
descaling the cut slabs in a reduction unit to a predetermined thickness to form a  
plurality of flat bars;  
rolling the slabs in a reduction unit to a predetermined thickness in a second  
heating furnace;  
coiling the flat bars by a coiling station while the flat bars are maintained in a  
heated state;  
uncoiling the flat bars by an uncoiler; and  
rolling the flat bars to a predetermined thickness in a finishing mill in a reversible  
manner.

7B 3  
6. The method of claim 1 wherein the slabs being rolled in the reduction unit are  
maintained to a temperature between 800 and 1000° C at an output of the reduction unit.

7B 4 ✓  
13. A method of for manufacturing hot rolled steel sheets comprising the steps of:  
passing molten steel through a continuous caster having a first cutter to form a  
plurality of cut slabs;  
heating the cut slabs to a first predetermined temperature in a first heating  
furnace;  
width rolling the cut slabs by using a width roller;  
descaling the cut slabs heated in the first heating furnace;  
rolling the slabs in a reduction unit to a predetermined thickness to form a  
plurality of flat bars;

heating the flat bars to a second predetermined temperate [of a second rolling] in a second heating furnace;

coiling the flat bars by a coiling station while the flat bars are maintained in a heated state;

uncoiling the plurality of flat bars by uncoilers; and

rolling the flat bars to a predetermined thickness in a finishing mill, in a reversible manner, while a rear end of a flat bar undergoing rolling is joined to a front end of another flat bar waiting to be rolled such that the flat bars can be continuously rolled; and cutting the flat bars to a predetermined length by a third cutter.

18. The method of claim 13 wherein the slabs being rolled in the reduction unit are maintained to a temperature between 800 and 1000° C at an output of the reduction unit.